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EXAMINER

BOKHARI, SYED M

ART UNIT

PAPER NUMBER

2473

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/720,135	<b>Applicant(s)</b> OCHI ET AL.	
	<b>Examiner</b> SYED BOKHARI	<b>Art Unit</b> 2473	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 40-46, 48-56 and 58-71 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 40-46, 48-56 and 58-71 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                        |                                                                   |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                            | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's amendment filed on November 3<sup>rd</sup>, 2009 has been entered. Claims 40, 54 and 68-70 have been amended. Claims 40-46, 48-56 and 58-71 are pending in the application.

### ***Claim Rejections - 35 USC § 101***

2. Claims 54-56 and 58-67 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 54 is rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claim recites a series of steps or acts to be performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing (Reference the May 15, 2008 memorandum issued by Deputy Commissioner for Patent Examining Policy, John J. Love, titled "Clarification of 'Processes' under 35 U.S.C. 101". The instant claim 54 neither transforms underlying subject matter nor tie to another statutory category that accomplishes the claimed method steps or acts, and therefore does not qualify as a statutory process.

Claims 55-56 and 58-67 are also rejected as the claimed invention is directed to non-statutory subject matter as described above.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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6. Claims 40-41, 54-55 and 68-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Franz et al. (US 6,393,388 B1) in view of Takizawa (US 5,444,817) and further in view of Bishop, Jr. et al. (US 6,553,021 B1).

Franz et al. disclose a translating apparatus for translating a first language sentence expression into second language expression with the following features: regarding claim 40, a voice data transmitting system, comprising a communication terminal configured to generate packets based on voice data (Fig. 5, a block diagram showing an example of a translating apparatus, see “an inputting part 1 of translating apparatus consists of voice recognition device” recited in column 8 lines 35-46), configured to divide the voice data into clause units in accordance with the divisions in a manner such that in a case where a part of the voice data specifies a plurality of speech sounds between two of the division, a corresponding clause unit of the clause units includes the part of the voice data that specifies the plurality of speech sounds (Fig. 5, a block diagram showing an example of a translating apparatus, see “the clause dividing part 4 cuts the first language sentence into clauses” recited in column 9 lines 16-24); regarding claim 41, the packet combine unit configured to transmit, for each of the clause units, the corresponding single packet over a communication path (Fig. 5, a block diagram showing an example of a translating apparatus, see “the clause combining part 15 supplies to the outputted part 16 for transmission” recited in column 11 lines 24-29); regarding claim 54, a method of creating voice packets, comprising generating packets based on voice data (Fig. 5, a block diagram showing an example of

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a translating apparatus, see “an inputting part 1 of translating apparatus consists of voice recognition device” recited in column 8 lines 35-46), dividing the voice data into clause units in accordance with the divisions in a manner such that in a case where a part of the voice data specifies a plurality of speech sounds between two of the divisions, a corresponding clause unit of the clause units includes the part of the voice data that specifies the plurality of speech sounds (Fig. 5, a block diagram showing an example of a translating apparatus, see “the clause dividing part 4 cuts the first language sentence into clauses” recited in column 9 lines 16-24); regarding claim 55, further comprising transmitting, for each of the clause units, the corresponding single packet over a communication path (Fig. 5, a block diagram showing an example of a translating apparatus, see “the clause combining part 15 supplies to the outputted part 16 for transmission” recited in column 11 lines 24-29); regarding claim 68, a voice data receiving system, comprising (Fig. 5, a block diagram showing an example of a translating apparatus, see “an inputting part 1 of translating apparatus consists of voice recognition device” recited in column 8 lines 35-46), a packet division unit configured to divide each of the plurality of received packets into corresponding plurality of real time communication packets (Fig. 5, a block diagram showing an example of a translating apparatus, see “the clause dividing part 4 cuts the first language sentence into clauses” recited in column 9 lines 16-24) and a communication terminal configured to reproduce voice data based on the corresponding plurality of real-time communication packets for each of the plurality of received packets (Fig. 5, a block diagram showing an example of a translating apparatus, see “the clause combining part 15 combines the results of

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plurality of clauses” recited in column 11 lines 21-29); regarding claim 69, a method of processing packets received over a communication path, the method comprising receiving a packet comprising a plurality of real-time communication packets corresponding to a clause unit over the communication path (Fig. 5, a block diagram showing an example of a translating apparatus, see “an inputting part 1 of translating apparatus consists of voice recognition device” recited in column 8 lines 35-46), dividing each of the packets into a corresponding plurality of real-time communication packets (Fig. 5, a block diagram showing an example of a translating apparatus, see “the clause dividing part 4 cuts the first language sentence into clauses” recited in column 9 lines 16-24) and reproducing voice data based on the corresponding plurality of real-time communication packets for each packet (Fig. 5, a block diagram showing an example of a translating apparatus, see “the clause combining part 15 combines the results of plurality of clauses” recited in column 11 lines 18-29);

Franz et al. do not disclose the following features: regarding claim 40, a voice recognizes unit configured to determine divisions of utterances represented by the voice data at which there are pauses in speech and a packet combine unit configured to combine, for each of the clause units, every packet of the real time voice data communication packets that includes portions of the voice data for the clause unit into a corresponding single packet; regarding claim 54, determining divisions of utterances represented by the voice data at which there are pauses in speech and combining, for each of the clause units, every packet of the real time voice data communication

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packets that includes portions of the voice data for the clause unit into a corresponding single packet.

Takizawa discloses a speech recognizing apparatus with the following features: regarding claim 40, a voice recognizes unit configured to determine divisions of utterances represented by the voice data at which there are pauses in speech (Fig. 10, a schematic block diagram showing the prior art speech recognizing apparatus, see “the speech recognizing apparatus recognizes the short and long utterances such as clause and sentence” recited in column 1 lines 9-15 and column 26 lines 7-30); regarding claim 54, determining divisions of utterances represented by the voice data at which there are pauses in speech (Fig. 10, a schematic block diagram showing the prior art speech recognizing apparatus, see “the speech recognizing apparatus recognizes the short and long utterances such as clause and sentence” recited in column 1 lines 9-15 and column 26 lines 7-30).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Franz et al. by using the features, as taught by Takizawa, in order to provide a voice recognizes unit configured to determine divisions of utterances represented by the voice data at which there are pauses in speech. The motivation of using these functions is to enhance the system in a cost effective manner.

Franz et al. and Takizawa do not fully disclose the following features: regarding claim 40, a packet combine unit configured to combine, for each of the clause units, every packet of the real time voice data communication packets that includes portions of the voice data for the clause unit into a corresponding single packet and regarding



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claim 54, combining, for each of the clause units, every packet of the real time voice data communication packets that includes portions of the voice data for the clause unit into a corresponding single packet.

Bishop, Jr. et al. disclose a communication system which relates to the field of time division multiple access (TDMA) and frequency division multiple access (FDMA) communications systems. More specifically, the present invention relates to methods and systems that improve the efficiency of transmitting packets of variable sizes through the use of new packet formatting techniques that reduce the overhead required for high data rate transmission with the following features: regarding claim 40, a packet combine unit configured to combine, for each of the clause units, every packet of the real time voice data communication packets that includes portions of the voice data for the clause unit into a corresponding single packet (Fig. 5, shows a simplified block diagram of a transmission section of a modem for transmitting a call in accordance with the preferred embodiment of the present invention, see "First packet assembler 90 receives real time signal 84 at a first input 96. In an exemplary embodiment of the present invention, real time signal 84 is a voice signal. A voice encoder 98 is coupled to first input 96 for encoding voice signal 84 into a digital bit stream according to predetermined encoding and generate first packets 111 of real time signal 84 in a first packet format 113" recited in column 6 lines 44-67 and column 7 lines 1-2) and regarding claim 54, combining, for each of the clause units, every packet of the real time voice data communication packets that includes portions of the voice data for the clause unit into a corresponding single packet (Fig. 5, shows a simplified block diagram of a transmission section of a

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modem for transmitting a call in accordance with the preferred embodiment of the present invention, see "First packet assembler 90 receives real time signal 84 at a first input 96. In an exemplary embodiment of the present invention, real time signal 84 is a voice signal. A voice encoder 98 is coupled to first input 96 for encoding voice signal 84 into a digital bit stream according to predetermined encoding and generate first packets 111 of real time signal 84 in a first packet format 113" recited in column 6 lines 44-67 and column 7 lines 1-2).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Franz et al. with Takizawa by using the features, as taught by Bishop, Jr. et al., in order to provide a packet combine unit configured to combine, for each of the clause units, every packet of the real time voice data communication packets that includes portions of the voice data for the clause unit into a corresponding single packet. The motivation of using these functions is to enhance the system in a cost effective manner.

7. Claim 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over Franz et al. (US 6,393,388 B1) in view of Takizawa (US 5,444,817) and Bishop, Jr. et al. (US 6,553,021 B1) and further in view of Hippelainen (US 6,614,797 B1).

Franz et al. disclose the following features: regarding claim 70, a voice data transmitting system, comprising a communication terminal configured to generate real time communication packets based on voice data (Fig. 5, a block diagram showing an

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example of a translating apparatus, see “an inputting part 1 of translating apparatus consists of voice recognition device” recited in column 8 lines 35-46), configured to divide the voice data into clause units in accordance with the divisions in a manner such that in a case where a part of the voice data specifies a plurality of speech sounds between two of the division, a corresponding clause unit of the clause units includes the part of the voice data that specifies the plurality of speech sounds (Fig. 5, a block diagram showing an example of a translating apparatus, see “the clause dividing part 4 cuts the first language sentence into clauses” recited in column 9 lines 16-24).

Takizawa discloses the following features: regarding claim 70, a voice recognizer unit having input from the communication terminal, the voice recognizer unit configured to determine division of utterances represented by the voice data at which there are pause in speech (Fig. 10, a schematic block diagram showing the prior art speech recognizing apparatus, see “the speech recognizing apparatus recognizes the short and long utterances such as clause and sentence” recited in column 1 lines 9-15 and column 26 lines 7-30).

Bishop, Jr. et al. disclose the following features: regarding claim 70, and a packet combine unit having inputs from an output of the communication terminal and output of the voice recognizer unit, the packet combine unit configured to combine, for each of the clause units, every packet of the packets that includes portions of the voice data for the clause unit into a corresponding single packet, the packet combine unit configured to transmit for each of the clause units, the corresponding single packet over a communication path (Fig. 5, shows a simplified block diagram of a transmission section

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of a modem for transmitting a call in accordance with the preferred embodiment of the present invention, see "First packet assembler 90 receives real time signal 84 at a first input 96. In an exemplary embodiment of the present invention, real time signal 84 is a voice signal. A voice encoder 98 is coupled to first input 96 for encoding voice signal 84 into a digital bit stream according to predetermined encoding and generate first packets 111 of real time signal 84 in a first packet format 113" recited in column 6 lines 44-67 and column 7 lines 1-2).

Franz et al., Takizawa and Bishop, Jr. et al. do not disclose the following features: regarding claim 70, wherein the communication path is a quality of service (QoS) non-guaranteed network.

Hippelainen a communication system for packet switched transmission with the following features: regarding claim 70, wherein the communication path is a quality of service (QoS) non-guaranteed network (Fig. 1, a block diagram of a data transmission network, see "without the quality of real-time speech transmission is impaired" recited in column 3 lines 10-19);

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Franz et al. with Takizawa and Bishop, Jr. et al. by using the features, as taught by Hippelainen, in order to provide the communication path is a quality of service (QoS) non-guaranteed network. The motivation of using these functions is to enhance the system in a cost effective manner.

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8. Claims 42-46, 58-62 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Franz et al. (US 6,393,388 B1) in view of Takizawa (US 5,444,817) and Bishop, Jr. et al. (US 6,553,021 B1) as applied to claim 40 above, and further in view of Huart et al. (USPN 7,013,267).

Franz et al., Takizawa and Bishop, Jr. et al. disclose the claimed limitations as described in paragraphs 5 and 6 above. Franz et al., Takizawa and Bishop, Jr. et al. do not disclose the following features: regarding claim 42, further comprising a file producer unit configured to produce, for each of the clause units, a corresponding file including the corresponding single packet; regarding claim 43, the file producer unit configured to transmit, for each of the clause units, the corresponding file further comprising transmitting, for each of the clause units, the corresponding file; regarding claim 44, the file producer unit configured to include, for each of the clause units, discrimination data in the corresponding file indicating contents of the corresponding file; regarding claim 45, further comprising a transmission monitoring unit configured to determine a communication state as at least one of a first state, a second state, and a third state, the voice data transmitting system configured to transmit the packets in a case where the transmission monitoring unit determines the communication state as being the first state, transmit, for each of the clause units, the corresponding single packet in a case where the transmission monitoring unit determines the communication state as being the second state and transmit, for each of the clause units, the corresponding file in a case where the third state; regarding claim 46, further comprising: a transmission

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monitoring unit configured to determine a communication state as at least one of a first state and a second state, the voice data transmitting system configured to transmit the packets in a case where the transmission monitoring unit determines the communication state as being the first state and transmit, for each of the clause units, the corresponding single packet in a case where the transmission monitoring unit determines the communication state as being the second state; regarding claim 58, further comprising producing, for each of the clause units, a corresponding file including the corresponding single packet; regarding claim 59, further comprising transmitting, for each of the clause units, the corresponding file over a communication path; regarding claim 60, the producing comprising including, for each of the clause units, discrimination data in the corresponding file that indicates contents of the corresponding file; regarding claim 61, further comprising determining a communication state as at least one of a first state, a second state, and a third state, transmitting the packets over a communication path in a case where the communication state is determined to be the first state, transmitting, for each of the clause units, the corresponding single packet over the communication path in a case where the communication state is determined to be the second state and transmitting, for each of the clause units, the corresponding file over the communication path in a case where the communication state is determined to be the third state; regarding claim 62, further comprising determining a communication state as at least one of a first state and a second state, transmitting the packets over a communication path in a case where the communication state is determined to be the first state and transmitting, for each of the clause units, the corresponding single packet

over the communication path in a case where the communication state is determined to be the second state and regarding claim 71, wherein the communication path is the internet.

Huart et al. disclose a communication system for reconstructing voice information with the following features: regarding claim 42, further comprising a file producer unit configured to produce, for each of the clause units, a corresponding file including the corresponding single packet (Fig. 1, illustrates a system that includes a destination that reconstructs voice information, see "where the transmitter produces a single set of data, i.e. a "file" that includes all the voice samples and the voice parameter" recited in column 4, lines 16-18); regarding claim 43, the file producer unit configured to transmit, for each of the clause units, the corresponding file further comprising transmitting, for each of the clause units, the corresponding file (Fig. 1, illustrates a system that includes a destination that reconstructs voice information, see "where the transmitter produces a single set of data, i.e. a "file" that includes all the voice samples and the voice parameter" recited in col. 4, lines 16-18); regarding claim 44, the file producer unit configured to include, for each of the clause units, discrimination data in the corresponding file indicating contents of the corresponding file (Fig. 1, illustrates a system that includes a destination that reconstructs voice information, see "where the voice parameter is, as broadly defined, discrimination data" recited in col. 4, lines 16-18); regarding claim 45, further comprising a transmission monitoring unit configured to determine a communication state as at least one of a first state, a second state, and a third state (Fig. 1, illustrates a system that includes a destination that reconstructs voice

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information, see "where the system determines the mode of operation it is conducting " recited in column 4, lines 21-27), the voice data transmitting system configured to transmit the packets in a case where the transmission monitoring unit determines the communication state as being the first state (Fig. 1, illustrates a system that includes a destination that reconstructs voice information, see "where each sample may be transmitted individually in a given mode " recited in column 4, lines 21-27 and column 3, lines 63-67), transmit, for each of the clause units, the corresponding single packet in a case where the transmission monitoring unit determines the communication state as being the second state (Fig. 1, illustrates a system that includes a destination that reconstructs voice information, see "where multiple samples may be transmitted in a single packet in a given mode " recited in column 4, lines 21-27 and column 3, lines 63-67) and transmit, for each of the clause units, the corresponding file in a case where the third state (Fig. 1, illustrates a system that includes a destination that reconstructs voice information, see "where a single packet may be accompanied by a voice parameter in a given mode where the single packet in conjunction with the voice parameter is the corresponding file" recited in column 4, lines 21-27); regarding claim 46, further comprising: a transmission monitoring unit configured to determine a communication state as at least one of a first state and a second state (Fig. 1, illustrates a system that includes a destination that reconstructs voice information, see "where the system determines the mode of operation it is conducting " recited in column 4, lines 21-27), the voice data transmitting system configured to transmit the packets in a case where the transmission monitoring unit determines the communication state as being the first state



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(Fig. 1, illustrates a system that includes a destination that reconstructs voice information, see "where each sample may be transmitted individually in a given mode" recited in column 4, lines 21-27 and column 3, lines 63-67) and transmit, for each of the clause units, the corresponding single packet in a case where the transmission monitoring unit determines the communication state as being the second state (Fig. 1, illustrates a system that includes a destination that reconstructs voice information, see "where multiple samples may be transmitted in a single packet in a given mode" recited in column 4, lines 21-27 and column 3, lines 63-67); regarding claim 58, further comprising producing, for each of the clause units, a corresponding file including the corresponding single packet (Fig. 1, illustrates a system that includes a destination that reconstructs voice information, see "where the transmitter produces a single set of data, i.e. a "file" that includes all the voice samples and the voice parameter" recited in column 4, lines 16-18); regarding claim 59, further comprising transmitting, for each of the clause units, the corresponding file over a communication path (Fig. 1, illustrates a system that includes a destination that reconstructs voice information, see "where the transmitter produces a single set of data, i.e. a "file" that includes all the voice samples and the voice parameter" recited in col. 4, lines 16-18); regarding claim 60, the producing comprising including, for each of the clause units, discrimination data in the corresponding file that indicates contents of the corresponding file (Fig. 1, illustrates a system that includes a destination that reconstructs voice information, see "where the voice parameter is, as broadly defined, discrimination data" recited in col. 4, lines 16-18); regarding claim 61, further comprising determining a communication state as at

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least one of a first state, a second state, and a third state (Fig. 1, illustrates a system that includes a destination that reconstructs voice information, see "where the system determines the mode of operation it is conducting " recited in column 4, lines 21-27), transmitting the packets over a communication path in a case where the communication state is determined to be the first state (Fig. 1, illustrates a system that includes a destination that reconstructs voice information, see "where each sample may be transmitted individually in a given mode " recited in column 4, lines 21-27 and column 3, lines 63-67), transmitting, for each of the clause units, the corresponding single packet over the communication path in a case where the communication state is determined to be the second state (Fig. 1, illustrates a system that includes a destination that reconstructs voice information, see "where multiple samples may be transmitted in a single packet in a given mode " recited in column 4, lines 21-27 and column 3, lines 63-67) and transmitting, for each of the clause units, the corresponding file over the communication path in a case where the communication state is determined to be the third state (Fig. 1, illustrates a system that includes a destination that reconstructs voice information, see "where a single packet may be accompanied by a voice parameter in a given mode where the single packet in conjunction with the voice parameter is the corresponding file" recited in column 4, lines 21-27); regarding claim 62, further comprising determining a communication state as at least one of a first state and a second state (Fig. 1, illustrates a system that includes a destination that reconstructs voice information, see "where the system determines the mode of operation it is conducting " recited in column 4, lines 21-27), transmitting the packets over a

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communication path in a case where the communication state is determined to be the first state (Fig. 1, illustrates a system that includes a destination that reconstructs voice information, see "where each sample may be transmitted individually in a given mode" recited in column 4, lines 21-27 and column 3, lines 63-67) and transmitting, for each of the clause units, the corresponding single packet over the communication path in a case where the communication state is determined to be the second state (Fig. 1, illustrates a system that includes a destination that reconstructs voice information, see "where multiple samples may be transmitted in a single packet in a given mode" recited in column 4, lines 21-27 and column 3, lines 63-67) and regarding claim 71, wherein the communication path is the internet (Fig. 1, illustrates a system that includes a destination that reconstructs voice information, see "Network 16 may be the internet" recited in column 3 lines 30-33).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Franz et al. with Takizawa and Bishop, Jr. et al. by using the features, as taught by Huart et al., in order to provide comprising a file producer unit configured to produce, for each of the clause units, a corresponding file including the corresponding single packet, the file producer unit configured to transmit, for each of the clause units, the corresponding file further comprising transmitting, for each of the clause units, the corresponding file, the file producer unit configured to include, for each of the clause units, discrimination data in the corresponding file indicating contents of the corresponding file, a transmission monitoring unit configured to determine a communication state as at least one of a first state, a second state, and

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a third state, the voice data transmitting system configured to transmit the packets in a case where the transmission monitoring unit determines the communication state as being the first state, transmit, for each of the clause units, the corresponding single packet in a case where the transmission monitoring unit determines the communication state as being the second state and transmit, for each of the clause units, the corresponding file in a case where the third state, a transmission monitoring unit configured to determine a communication state as at least one of a first state and a second state, the voice data transmitting system configured to transmit the packets in a case where the transmission monitoring unit determines the communication state as being the first state and transmit, for each of the clause units, the corresponding single packet in a case where the transmission monitoring unit determines the communication state as being the second state, the communication terminal configured to generate the packets as real-time communication packets, generating the packets as real-time communication packets, producing, for each of the clause units, a corresponding file including the corresponding single packet, transmitting, for each of the clause units, the corresponding file over a communication path, the producing comprising including, for each of the clause units, discrimination data in the corresponding file that indicates contents of the corresponding file, determining a communication state as at least one of a first state, a second state, and a third state, transmitting the packets over a communication path in a case where the communication state is determined to be the first state, transmitting, for each of the clause units, the corresponding single packet over the communication path in a case where the communication state is determined to

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be the second state and transmitting, for each of the clause units, the corresponding file over the communication path in a case where the communication state is determined to be the third state, determining a communication state as at least one of a first state and a second state, transmitting the packets over a communication path in a case where the communication state is determined to be the first state and transmitting, for each of the clause units, the corresponding single packet over the communication path in a case where the communication state is determined to be the second state and the communication path is the internet. The motivation of using these functions is to enhance the system in a cost effective manner.

9. Claims 51-53 and 63-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Franz et al. (US 6,393,388 B1) in view of Takizawa (US 5,444,817) and Bishop, Jr. et al. (US 6,553,021 B1) as applied to claim 40 and 54 above, and further in view of McDonald (USPN 6,480,827).

Franz et al., Takizawa and Bishop, Jr. et al. disclose the claimed limitations as described in paragraph 5 above. Franz et al., Takizawa and Bishop, Jr. et al. do not disclose the following features: regarding claim 51, the voice recognizer unit configured to determine the divisions based on a movement of lips of a user that produces the utterances represented by the voice data; regarding claim 52, the voice recognizer unit configured to determine the divisions based on vibrations of a throat of a user that produces the utterances represented by the voice data; regarding claim 53, the voice

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recognizer unit configured to determine the divisions based on externally provided instructions; regarding claim 63, the determining comprising determining the divisions based on a sound level of a voice that produces the utterances represented by the voice data; regarding claim 64, the determining comprising determining the divisions based on a sound pitch of a voice that produces the utterances represented by the voice data; regarding claim 65, the determining comprising determining the divisions based on a movement of lips of a user that produces the utterances represented by the voice data; regarding claim 66, the determining comprising determining the divisions based on a movement of lips of a user that produces the utterances represented by the voice data and regarding claim 67, the determining comprising determining the divisions based on externally provided instructions.

McDonald disclose a communication system for voice which obtains greater speech correlation performance between input and output utilizing a speech post-processor with the following features: regarding claim 51, the voice recognizer unit configured to determine the divisions based on a movement of lips of a user that produces the utterances represented by the voice data (Fig. 3, a flow chart of the speech post processor, see “the parsing operation is done in any conventional manner” recited in column 4, lines 27-35); regarding claim 52, the voice recognizer unit configured to determine the divisions based on vibrations of a throat of a user that produces the utterances represented by the voice data (Fig. 3, a flow chart of the speech post processor, see “the parsing operation is done in any conventional manner” recited in column 4, lines 27-35); regarding claim 53, the voice recognizer unit

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configured to determine the divisions based on externally provided instructions (Fig. 3, a flow chart of the speech post processor, see “the parsing operation is done in any conventional manner” recited in column 4, lines 27-35); regarding claim 63, the determining comprising determining the divisions based on a sound level of a voice that produces the utterances represented by the voice data (Fig. 3, a flow chart of the speech post processor, see “the parsing operation is done in any conventional manner” recited in column 4, lines 27-35) regarding claim 64, the determining comprising determining the divisions based on a sound pitch of a voice that produces the utterances represented by the voice data (Fig. 3, a flow chart of the speech post processor, see “the parsing operation is done in any conventional manner” recited in column 4, lines 27-35); regarding claim 65, the determining comprising determining the divisions based on a movement of lips of a user that produces the utterances represented by the voice data (Fig. 3, a flow chart of the speech post processor, see “the parsing operation is done in any conventional manner” recited in column 4, lines 27-35); regarding claim 66, the determining comprising determining the divisions based on a movement of lips of a user that produces the utterances represented by the voice data (Fig. 3, a flow chart of the speech post processor, see “the parsing operation is done in any conventional manner” recited in column 4, lines 27-35) and regarding claim 67, the determining comprising determining the divisions based on externally provided instructions (Fig. 3, a flow chart of the speech post processor, see “the parsing operation is done in any conventional manner” recited in column 4, lines 27-35).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Franz et al. with Takizawa and Bishop, Jr. et al. by using the features, as taught by McDonald, in order to provide the voice recognizer unit configured to determine the divisions based on a movement of lips of a user that produces the utterances represented by the voice data, the voice recognizer unit configured to determine the divisions based on vibrations of a throat of a user that produces the utterances represented by the voice data, the voice recognizer unit configured to determine the divisions based on externally provided instructions, the determining comprising determining the divisions based on a sound level of a voice that produces the utterances represented by the voice data, determining comprising determining the divisions based on a sound pitch of a voice that produces the utterances represented by the voice data, determining comprising determining the divisions based on a movement of lips of a user that produces the utterances represented by the voice data, determining comprising determining the divisions based on a movement of lips of a user that produces the utterances represented by the voice data and comprising determining the divisions based on externally provided instructions. The motivation of using these functions is to enhance the system in a cost effective manner.

10. Claims 49-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Franz et al. (US 6,393,388 B1) in view of Takizawa (US 5,444,817), Bishop, Jr. et al.



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(US 6,553,021 B1) and Huart et al. (USPN 7,013,267) as applied to claims 40 and 54 above, and further in view of McDonald (USPN 6,480,827).

Franz et al., Takizawa and Bishop, Jr. et al. disclose the claimed limitations as described in paragraph 5 above. Huart et al. disclose the following features: regarding claim 49, the voice recognizer unit configured to (Fig. 1, illustrates a system that includes a destination that reconstructs voice information, see “the processor 26 generates a voice parameter that may be a pitch period magnitude measure” recited in column 7, lines 12-17); regarding claim 50, the voice recognizer unit configured to (Fig. 1, illustrates a system that includes a destination that reconstructs voice information, see “the processor 26 generates a voice parameter that may be a pitch period magnitude measure” recited in column 7, lines 12-17);

Franz et al., Takizawa, Bishop, Jr. et al. and Huart et al. do not disclose the following features: regarding claim 49, determine the divisions based on a sound level of a voice that produces the utterances represented by the voice data; regarding claim 50, determine the divisions based on a sound pitch of a voice that produces the utterances represented by the voice data.

McDonald discloses the following features: regarding claim 49, determine the divisions based on a sound level of a voice that produces the utterances represented by the voice data (Fig. 3, a flow chart of the speech post processor, see “the parsing operation is done in any conventional manner” recited in column 4, lines 27-35); regarding claim 50, determine the divisions based on a sound pitch of a voice that

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produces the utterances represented by the voice data (Fig. 3, a flow chart of the speech post processor, see “the parsing operation is done in any conventional manner” recited in column 4, lines 27-35).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Franz et al. with Takizawa, Bishop, Jr. et al. and Huart et al. by using the features, as taught by McDonald, in order to provide to determine the divisions based on a sound level of a voice that produces the utterances represented by the voice data. The motivation of using these functions is to enhance the system in a cost effective manner.

11. Claims 40-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Franz et al. (US 6,393,388 B1) in view of Takizawa (US 5,444,817), Bishop, Jr. et al. (US 6,553,021 B1) as applied to claims 40 and 54 above, and further in view of Cox et al. (US 6,775,652 B1).

Franz et al., Takizawa and Bishop, Jr. et al. disclose the claimed limitations as described in paragraph 5 above. Franz et al., Takizawa and Bishop, Jr. et al. do not disclose the following features: regarding claim 48, the packet combine unit configured to retransmit, upon receiving a retransfer request for a clause unit of the clause units, the corresponding single packet for the clause unit; regarding claim 56, further comprising retransmitting, upon receiving a retransfer request for a clause unit of the clause units, the corresponding single packet for the clause unit.

Cox et al. disclose a communication system for speech recognition over lossy transmission system with the following features: regarding claim 48, the packet combine unit configured to retransmit, upon receiving a retransfer request for a clause unit of the clause units, the corresponding single packet for the clause unit (Fig. 2, depicts a method of coding, packetizing, transmitting and recognizing speech over a lossy transmission system, see "request for retransmission of missing or corrupted packet is made at step 136 and packet is transmitted from the at step 128 from the storage for each packet before transmission at step 126" recited in column 1 lines 57-67, column 2 lines 1-2 and column 7 lines 2-5); regarding claim 56, further comprising retransmitting, upon receiving a retransfer request for a clause unit of the clause units, the corresponding single packet for the clause unit (Fig. 2, depicts a method of coding, packetizing, transmitting and recognizing speech over a lossy transmission system, see "request for retransmission of missing or corrupted packet is made at step 136 and packet is transmitted from the at step 128 from the storage for each packet before transmission at step 126" recited in column 1 lines 57-67, column 2 lines 1-2 and column 7 lines 2-5).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Franz et al. with Takizawa and Bishop. Jr. et al. by using the features, as taught by Cox et al., in order to provide the packet combine unit configured to retransmit, upon receiving a retransfer request for a clause unit of the clause units, the corresponding single packet for the clause unit. The motivation of using this function is to enhance the system in a cost effective manner.

### ***Response to Arguments***

12. Applicant's arguments with respect to claims 40-46, 48-56 and 58-71 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SYED BOKHARI whose telephone number is (571)270-3115. The examiner can normally be reached on Monday through Friday 8:00-17:00 Hrs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang B. Yao can be reached on (571) 272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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